

*WETLANDS
from Comprehensive Plan
1969 (in Duxbury Rm.)*

B. Cranberry Bogs

Cranberry bogs are one of the most distinctive features in the Duxbury landscape.

In general, the natural conditions of Southeastern Massachusetts are favorable to this specialized agricultural crop. Cranberries grow best in low swampland where the soil is of a high acid content. Preparation of the land includes cutting trees, pulling stumps, and clearing the surface material to a depth of about one foot where native peat is encountered. Then about two inches of sand is spread and the cranberry vines are planted.

Since cranberries are very susceptible to frost, they are protected by flooding with water during cold spells. This is why each bog or system of bogs needs a natural pond or man-made reservoir nearby. Artificial sprinkling systems are now used by many cranberry growers as they conserve water, and the same sprinklers can be used to control weeds and insects.

The average production figures for Massachusetts since 1960 are 60 barrels per acre (with 100 pounds to a barrel). In terms of cash value, this averages out to \$15.00 per barrel or \$900. per acre for any particular season. In comparison to other agricultural crops, cranberries are considered an intensive use, high-value crop. We have been advised by United States Department of Agriculture personnel at the cranberry experimental station in East Wareham that Duxbury compares favorably to the average state figures quoted above, and that because of their economic value, bogs used for cranberry production there will remain in productive use for at least the next 10 to 15 years.

Inasmuch as the 380 acres of cranberry bogs in Duxbury are a productive and valuable use of land otherwise difficult for man to use, it is recommended that wherever bogs are located in proximity to the proposed greenbelts, they be included as natural elements in such a greenbelt system. This general recommendation means that these cranberry bogs and associated reservoir ponds need not be publically acquired by the town since they are expected to continue as profitable private operations at least until 1985.

C. Eastern Greenbelt

One of the primary recommendations of this chapter is the establishment of a continuous greenbelt in the eastern part of Duxbury. Since this is the oldest and most settled portion of town, this eastern greenbelt is considered to be of a higher priority than any subsequent recommendations concerning conservation areas in other, less built-up areas of town.

The natural outlines of such a greenbelt are discernable from a study of the landscape. Beginning at the north in the tidal Duxbury Marsh, a system of wetlands extends westward along the Back River and Duck Hill River, until the head of West Brook is reached a couple of miles inland at North Hill Marsh. Just about a half-mile south of this large, freshwater marsh is the northern shore of Island Creek Pond. From this large pond flows Island Creek in a southerly direction, through man-made Mill Pond and eventually into Kingston Bay, a distance of some six miles from the original starting point at Duxbury Marsh. Interspersed along this natural greenbelt are pieces of conservation and recreation land already owned by the Town of Duxbury and various other private and semi-public groups in town. Therefore, in order to establish a continuous and permanent greenbelt in the eastern part of town, the following areas as discussed should be acquired by the town.

1. Duxbury Marsh

Duxbury Marsh, a large salt-marsh area which has been formed over the centuries between Duxbury Beach and higher land to the west and north, contains over 1,000 acres in both Duxbury and Marshfield. Like all salt marshes, Duxbury Marsh is ecologically among the most productive areas on earth. Decomposing plants and minute animals that thrive there wash into the coastal waters of Duxbury Bay and beyond to provide food for both shellfish and finfish. Without these basic nutrients, untoward damage would result to the marine fish which depend on the productivity of Duxbury Marsh for their sustenance. Specifically, Duxbury Bay produces both soft and hard shell clams, blue mussels, striped bass, and winter flounder - with cod and haddock found in the deeper waters east of Gurnet Point. In addition, the marsh-bay habitat supports many kinds of ducks and geese, especially black duck, and many species of waterfowl find this a particularly good winter feeding area.

At the present time, the Duxbury Beach Association owns about seventy-five acres of Duxbury Marsh contiguous to the beach. The Duxbury Conservation Commission estimates that 70 to 80 percent of the approximately 750-acre marsh is without title. This means it may be possible for the town to claim such land, although the legality of such a move would have to be carefully studied. In any case, it is recommended that the town acquire as much of the Duxbury Marsh as possible, either by gift, easement, or outright purchase.

2. Duck Hill River - West Brook

The Duck Hill River remains tidal some distance inland, with the salt marsh becoming fresh marsh just east of Tremont Street. West of Tremont Street there is a small pond owned by the Duxbury Water Department,

on either side of which are located two well fields. The Water Department also owns some 25 acres of watershed land north and south of the pond. West Brook flows into this pond from its source in the North Hill Marsh, about a mile to the south. On either side of West Brook are extensive swamplands. It is recommended that the town purchase, either by title or easement, enough of the wetland on either side of West Brook and the Duck Hill River to preserve the continuous water course and watershed from the North Hill Marsh to its outlet in Duxbury Marsh.

3. North Hill Country Club and North Hill Marsh Trust

Fitting into the proposed eastern greenbelt in the North Hill Marsh area are two large private holdings of approximately 200 acres each. The North Hill Country Club currently has a clubhouse and a 9-hole golf course located on upland northeast of the marsh. The club, which is open to the public upon payment of a fee, plans expansion to an 18-hole course in the near future. The North Hill Marsh Trust is a private duck hunting club which owns most of the marsh, as well as upland areas on either side of it. Since both of these private holdings are entirely compatible with the conservation and recreation uses of a greenbelt, no specific recommendation concerning the town is necessary.

4. Town Forest

Just south of the North Hill Marsh Trust is the Town Forest which has recently been expanded by the Conservation Commission to some 75 to 80 acres altogether. White pine predominates in the Town Forest, with some pitch pine and oak. Upland game and songbirds are the wildlife found there, with snowshoe hare stocked by the state Division of Fisheries and Game. The proposed recreation uses for the expanded Town Forest include hiking, camping, picnicking, riding, and nature study. In addition, practices of forest management are to be put into effect. A natural resources management plan is scheduled to be completed sometime this year by the state District Forester.

Just south of Mayflower Street and near Round Pond, the Duxbury Rural and Historical Society owns about 50 acres or so of conservation land. It is recommended that the town purchase an additional 60 acres contiguous to the R & H land, just south of Mayflower Street and extending to the northwestern shores of Island Creek Pond. This would extend the Town Forest from the North Hill Marsh to Island Creek Pond, and give the town a contiguous conservation-recreation area on either side of Mayflower Street. Of secondary importance, it is also recommended that the town purchase about 30 acres just west of the present Town Forest and north of land owned by the Rural and Historical Society on Mayflower Street. The latter area would fill in the boundary line of the Town Forest as far west,

If the town sees fit to buy only part of Bay Farm, then that portion running in a strip from Bay Road down to the water and including the wetland at the mouth of Island Creek is considered to be the most important area - both from a conservation point of view and from a scenic point of view, for the view across the mouth of the creek to the Standish Monument on the other side of Kingston Bay is among the most beautiful in Duxbury.

One last recommendation concerning Bay Farm is that the town meet with the Kingston Conservation Commission to see if that part of the former farm in Kingston can't be preserved as open space as well. Assuming that the town purchased Bay Farm, this would certainly be a more compatible use for Duxbury than a housing development coming right up to the town line.

In addition to the proposed eastern greenbelt discussed previously, there are a number of other areas in the eastern part of town that deserve mention as areas for preservation. Although none of them is as extensive as the continuous greenbelt, they are considered to be high priority conservation-recreation areas because of their location in the most developed part of Duxbury.

D. Bluefish River

The Bluefish River empties into Duxbury Bay on the eastern side of Washington Street, after flowing some two miles from its southern branch near Partridge Road, and about the same distance from its western branch on the other side of Tremont Street. About seven acres of tidal marsh along the river's bank on either side of Washington Street are now owned by both the Rural and Historical Society and the town. The town maintains small boat ramps on either side of the Washington Street bridge which are seldom used because of inadequate space for parking and insufficient water at low tide.

It is recommended that the town acquire title or an easement to all of the tidal marsh along the Bluefish River. This marshland is found on both sides of the river's mouth on Duxbury Bay, and as far inland as the high school property along the western branch and the Duxbury Golf Course along the southern branch. It is also recommended that easements or title be acquired along the entire length of both branches of the river in order to preserve the stream banks and the quality of the water. Following a recommendation contained in the 1959 General Plan by James Harris, the town has already established a wildlife sanctuary on school property by damming up a portion of the western branch of the Bluefish River. Private duck ponds have also been built on the southern branch of the river between Harrison Street and Partridge Road. Since the branches of the Bluefish River are two of the longest streams in town that do not have extensive wetlands along their course, and since they flow

through some of the most settled portions of town, it is further recommended that walking, jogging, riding, and cycling paths be developed along these branches where appropriate. In combination with the paths that already exist through the school and golf course properties, some very interesting and worthwhile exercise trails can be established for people living in this part of Duxbury.

E. Old Railroad Bed

While on the subject of establishing paths and walkways in Duxbury, the most ideal place for their location would be the old railroad bed which cuts in a north-south direction through the entire eastern part of town between Washington Street-Bay Road and Tremont Street. Although certain parts of this right of way are built on, much of it has grown up to grass, bushes, and other vegetation. It could serve as a connecting link between the School Property and the John Alden House on Alden Street, and the new neighborhood play area on Tremont Street near Wadsworth Road - and even as far south as the proposed greenbelt along Island Creek. It is interesting to point out that the 1959 General Plan recommended a walk or trail along the railroad bed from the golf course to the Pilgrim By Way. If all or part of this right of way were acquired by the town and developed from Alden Street to Island Creek, Duxbury would have a very valuable addition to its open space system in one of the most developed and accessible parts of town. It is therefore recommended that as much of the old railroad right of way as possible between Alder Street and Island Creek be purchased and that paths for walking, jogging, riding, and cycling be constructed where appropriate.

F. Coastal Marsh Areas

In addition to the salt-marsh areas already mentioned, there are several smaller areas along the coast which should also be preserved.

One of them is located on Standish Shores along Eagles Nest Bay and extends some distance inland south of Marshall Street. All of this tidal marsh should be preserved for conservation reasons, and it is recommended that the town acquire either the title or an easement there.

Another salt-marsh area which should be preserved both for ecological and scenic reasons is located in the so-called Nook. As one travels south on Bay Road from Hall's Corner, the marsh area extends almost to the road. It is recommended that the town also acquire this area.

The third coastal area which should be preserved is the next marsh inlet on Bay Road, just south of the Nook. There is also a stream